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August 3, 2005

Ex Parte

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Developing a Unified Intercarrier Compensation Regime, CC Docket No. 01-92

Dear Ms. Dortch:

On August 2, 2005, Amy Rosenthal, Karen Zacharia and the undersigned of Verizon, met with Russ Hanser of Commissioner Kathleen Abernathy's office to discuss Verizon's position regarding "phantom traffic." Verizon's comments were consistent with the attached hand-outs which were used as a basis for discussion in the meeting.

Sincerely,

A handwritten signature in black ink that reads "Donna Epps". The signature is written in a cursive, flowing style.

Attachments

cc: Tamara Preiss
Steve Morris

ATTACHMENT A



Phantom Traffic

August 2, 2005

Phantom Traffic

What is Phantom Traffic?



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- ♦ **“Phantom Traffic” is a term that has been used to refer to two types of traffic:**

(1) traffic that purportedly lacks identification of the carrier to be billed; and

(2) traffic that purportedly lacks sufficient information to jurisdictionalize a call for billing purposes such as Calling Party Number (CPN) and Charge Number (CN).

Phantom Traffic

I. Carrier Identification



- ♦ **The carrier to be billed can be identified by either a Carrier Identification Code (CIC code) or an Operating Company Number (OCN).**

- ♦ **For the great majority of calls that transit Verizon's network, Verizon provides the terminating carrier with a terminating access record that shows either a CIC code or an OCN for each call.**
 - For example, in a recent sample study of over 80K terminating access records sent to 6 RLECs, 100 percent of those records contained either a CIC or OCN.

Phantom Traffic

I. Carrier Identification, cont.



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- ♦ **Industry standards establish when OCN versus CIC should be used on terminating access records.**
 - ♦ **Understanding industry standards regarding use of CIC or OCN aids carriers using terminating access records to identify the carrier to be billed.**
 - ♦ **Verizon has assisted other carriers in understanding carrier identification data on terminating access records.**



- ♦ **What is the relevant jurisdictional information?**
 - CPN
 - CN
 - Jurisdictional Information Parameter (JIP)
- ♦ **For most types of traffic, Verizon provides terminating carriers with the CPN/CN it receives via a terminating access record. Although SS7 is primarily designed for routing – not billing – Verizon also provides any CPN, CN and JIP it receives via SS7 signaling.**
- ♦ **In some cases, Verizon receives invalid, inaccurate or missing CPN/CN. In those instances, Verizon can only pass along the data it receives.**



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- ♦ **Reasons Verizon may receive invalid, inaccurate or missing CPN/CN:**
 - Use of MF signaling
 - Intentional acts by third parties to mask call's jurisdiction

II. Jurisdictional Information, cont.

- ◆ **Reasons CPN/CN may not indicate proper jurisdiction:**
 - VOIP traffic
 - Wireless roaming
 - 1-800 traffic
 - Traffic misrouted by others can create the appearance of phantom traffic
 - Originating carriers' failure to route calls pursuant to the LERG
 - IXC failure to query LNP database in order to route traffic to proper terminating carrier.

Phantom Traffic

Impact to Verizon



- ♦ **Verizon is not immune to billing problems associated with invalid or inaccurate CPN/CN.**
 - Approximately 20 percent of all traffic that's delivered to Verizon's network lacks a valid CPN/CN.
 - Approximately $\frac{3}{4}$ of those calls terminate on Verizon's network.
 - The remaining $\frac{1}{4}$ is transit traffic that terminates on other carriers' networks.
 - Transit traffic lacking valid CPN/CN negatively impacts Verizon's ability to bill for transit.

Phantom Traffic

Verizon's Response to Phantom Traffic



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- ◆ **Verizon has addressed phantom traffic through its contractual arrangements.**
 - Use of factors to jurisdictionalize traffic with invalid or missing CPN/CN.
 - Contractual provisions for traffic with invalid or missing CPN/CN.
 - ◆ **Other carriers can employ similar methods to address phantom traffic.**
 - These methods are available for transiting traffic as well, because Verizon provides the identity of the carrier to be billed.

Phantom Traffic Summary



- 1) Verizon attempts to provide terminating carriers with the information they need to identify the appropriate carrier to be billed.**
- 2) Concerns about invalid CPN/CN and fraud are industry-wide problems for all carriers.**
- 3) Tandem providers that identify the carrier to be billed should not be held responsible for inaccurate or invalid information received from those carriers.**

ATTACHMENT B



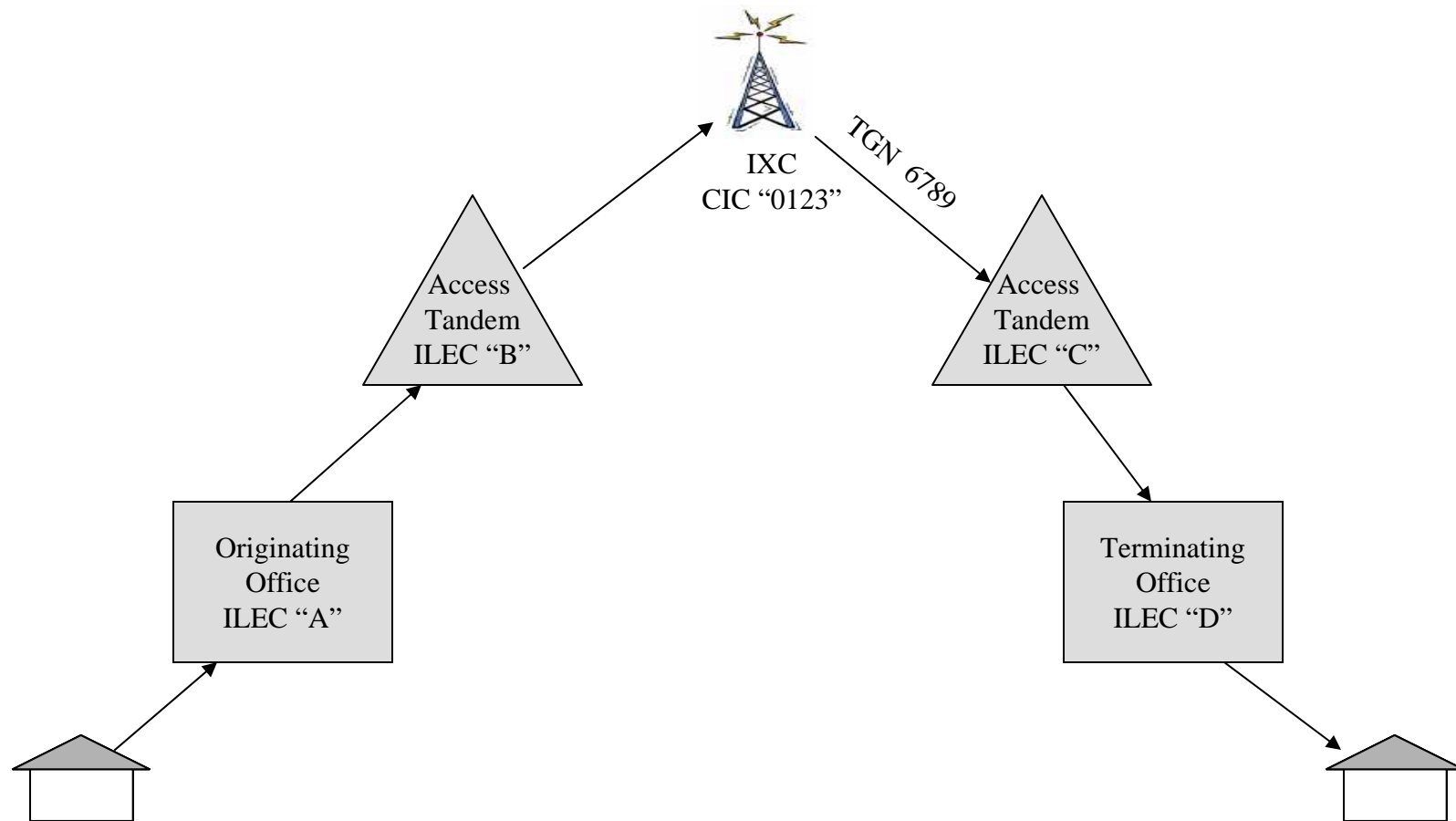
Phantom Traffic

Sample Call Flows

August 2005

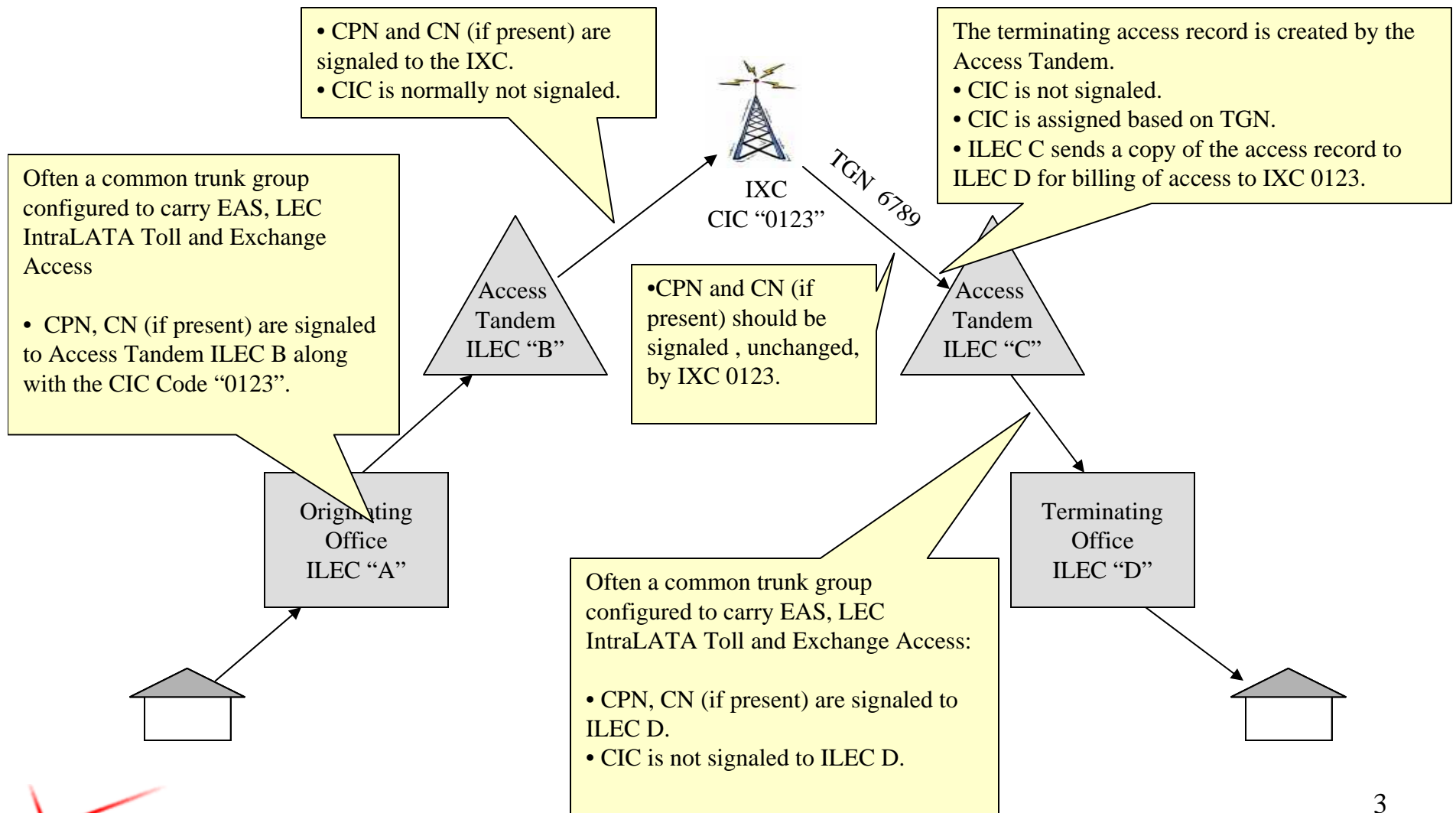


Traditional Equal Access (FGD)

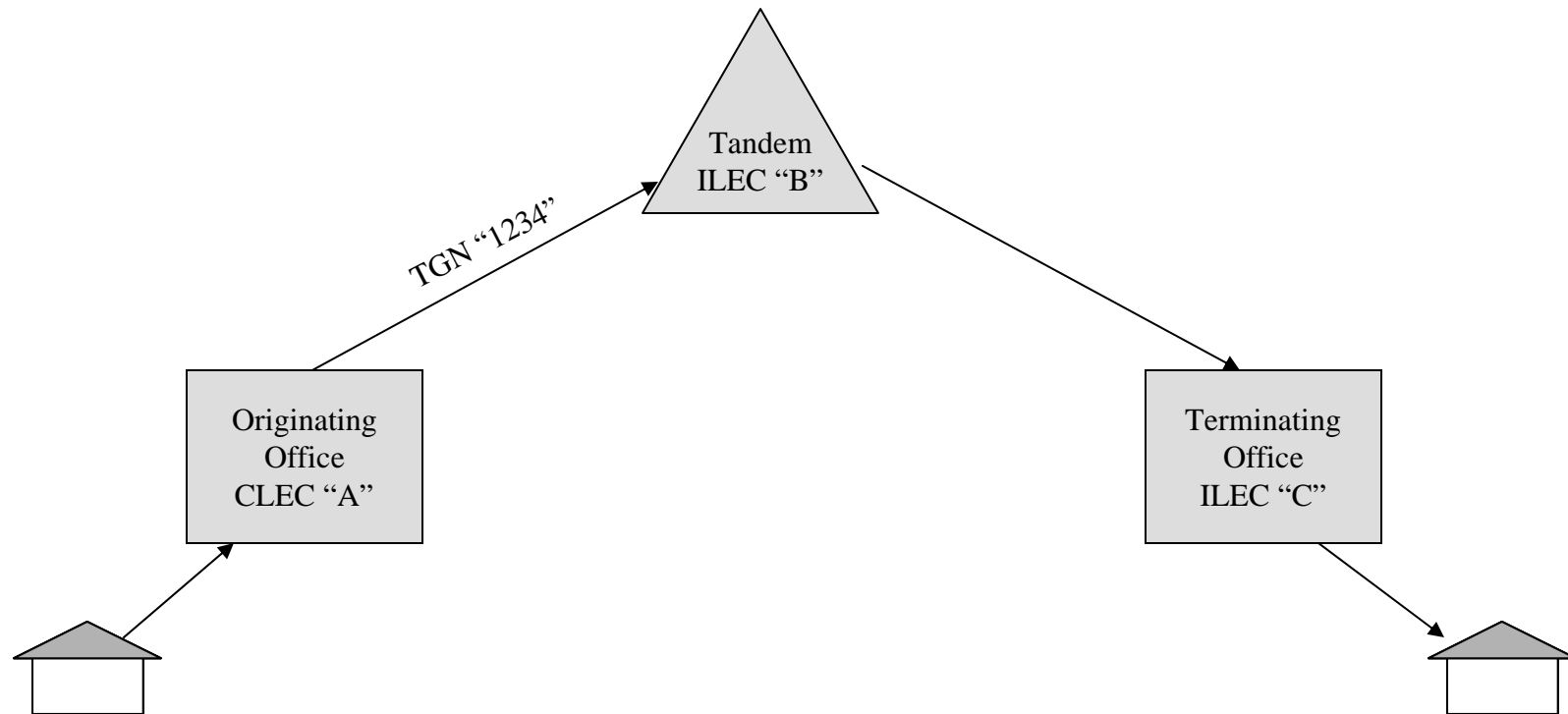


Traditional Equal Access (FGD)

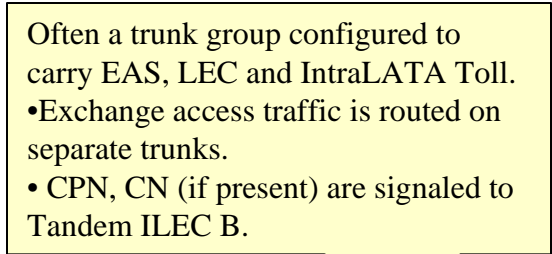
SS7 Signaling and Terminating Access Records



Local/EAS/ LEC IntraLATA Toll Call Completion Involving a Tandem Switch



Local/EAS/ LEC IntraLATA Toll SS7 Signaling and Terminating Access Records

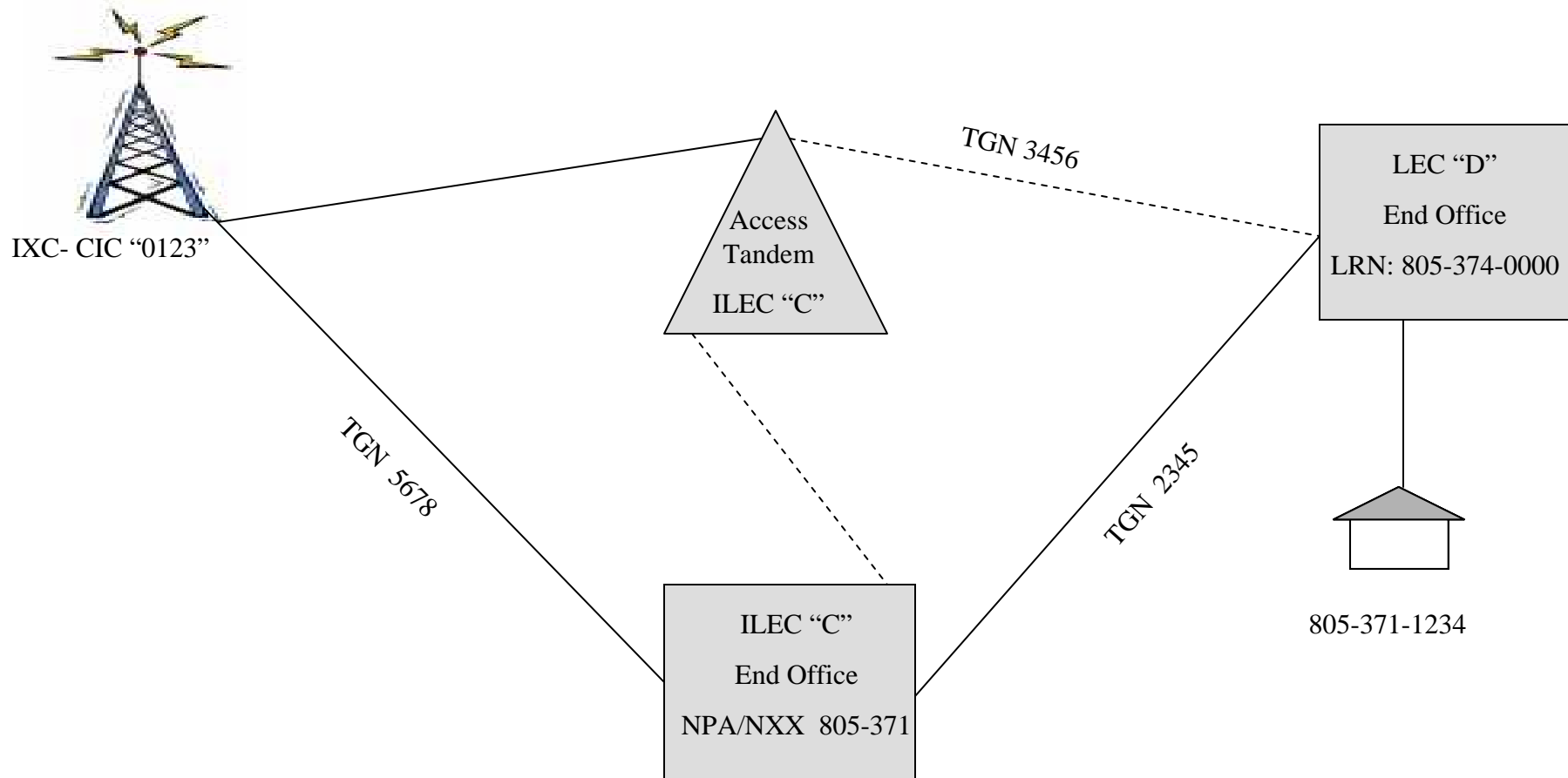


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| <p>A terminating access record is typically created by Tandem ILEC B. The OCN of CLEC A is populated on the call record based on TGN and tables.</p> <ul style="list-style-type: none"> • CPN, CN (if present) are signaled to ILEC C. <p>ILEC B sends a copy of the terminating access record to ILEC C for billing of intercarrier compensation to CLEC A.</p> |
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ILEC C may create its own terminating access records, or monitor SS7. ILEC C's record may differ from the terminating access record created by ILEC B.

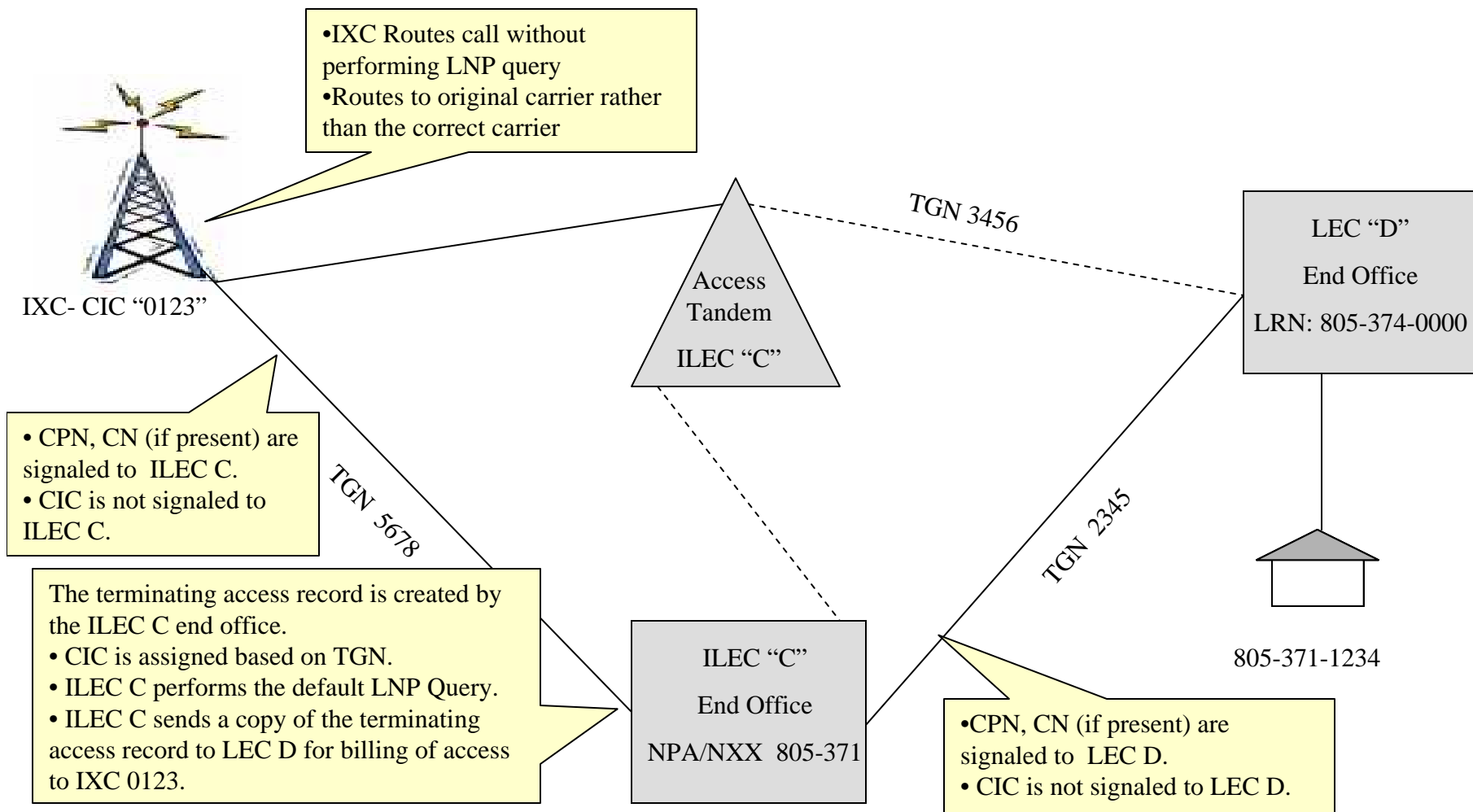
Often a common trunk group configured to carry EAS, LEC IntraLATA Toll and Exchange Access.

Terminating Exchange Access Traffic Involving LNP



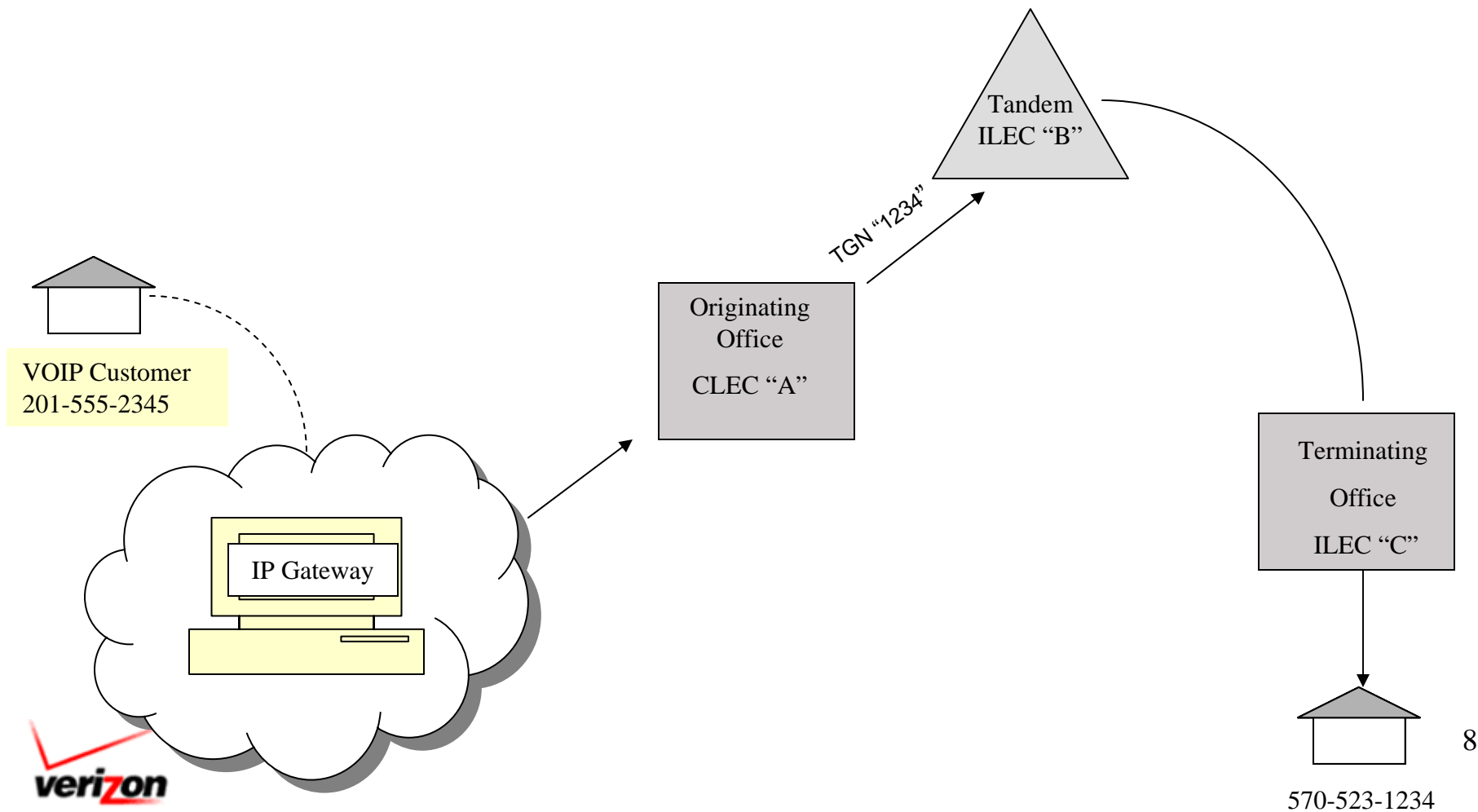
Terminating Exchange Access Traffic Involving LNP

SS7 Signaling and Terminating Access Records



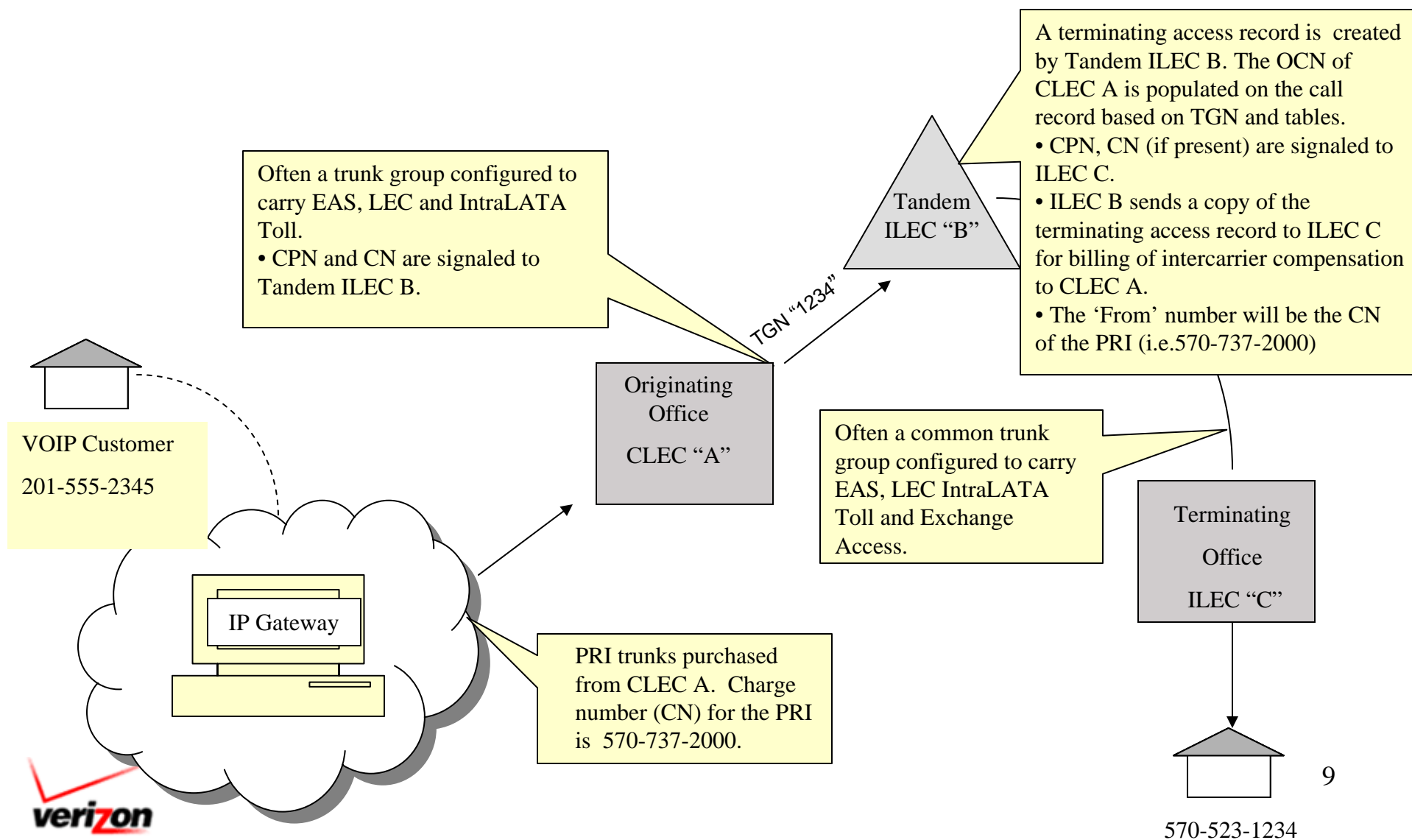
VOIP: IP to PSTN Call Completion

VOIP Subscriber Calls a Buffalo Valley Telephone Subscriber “570-523-1234”



VOIP: IP to PSTN Call Completion

SS7 Signaling and Terminating Access Records



Interstate Call from NJ to Buffalo Valley

Side by Side Comparison of IXC Routed vs. VoIP/CLEC Routed

Interstate Call Through IXC

Information provided to Receiving LEC:

Signalling:

- CPN (201) 555-2345

Terminating Access

Record:

- CIC – 0123
- CPN (201) 555-2345

Interstate Call Through VoIP/CLEC

PRI trunks provided by CLEC.
Charge number (CN) for the PRI is 570-737-2000.

Information provided to Receiving LEC:

Signalling:

- CPN (201) 555-2345
- CN (570) 737-2000

Terminating Access

Record:

- OCN – 4567
- CN 570-737-2000

